Textbook Alignment to the Utah Core – 3rd Grade Science

This alignment has been completed using an "Independent Alignment Vendor" from the USOE approved list (www.schools.utah.gov/curr/imc/indvendor.html.) ***Yes*** __✓__ ***No*** _____

Name of Company and Individual Conducting Alignment: Standard Media Services, LLC: David A. Johnson

A "Credential Sheet" has been completed on the above company/evaluator and is (Please check one of the following):

☐ **On record with the USOE.**

✓ **The "Credential Sheet" is attached to this alignment.**

Instructional Materials Evaluation Criteria (name and grade of the core document used to align): 3rd Grade Science Core Curriculum

Title: *Science: A Closer Look, Gr. 3 ©2008* **ISBN#:** 978-0-02-284136-2

Publisher: Macmillan/McGraw-Hill

Overall percentage of coverage in the *Student Edition (SE) and Teacher Edition (TE)* of the Utah State Core Curriculum: 92 %

Overall percentage of coverage in *ancillary materials* of the Utah Core Curriculum: _____%

STANDARD I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce pearance of the sun and moon moving through the sky.

Percentage of coverage in the *student and teacher edition* for Standard I: 100 %	**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard I: _____%**		
	Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or***

OBJECTIVES & INDICATORS				***ancillaries*** ✓
Objective 1.1: Describe the appearance of Earth and the moon.				
a.	Describe the shape of Earth and the moon as spherical.	SE/TE: 305, 328, 332		
b.	Explain that the sun is the source of light that lights the moon.	SE/TE: 329		
c.	List the differences in the physical appearance of Earth and the moon as viewed from space.	SE/TE: 318, 319, 327, 328-329, 331, 334-335		
Objective 1.2: Describe the movement of earth and the moon and the apparent movement of other bodies through the sky.				
a.	Describe the motions of Earth (i.e., the rotation [spinning] of Earth on its axis, the revolution [orbit] of Earth around the sun).	SE/TE: 315, 319, 320-321, 323, 326-335, 334-335, 350		
b.	Use a chart to show that the moon orbits Earth approximately every 28 days.	SE/TE: 330		
c.	Use a model of Earth to demonstrate that Earth rotates on its axis once every 24 hours to produce the night and day cycle.	SE/TE: 319		
d.	Use a model to demonstrate why it seems to a person on Earth that the sun, planets, and stars appear to move across the sky.	SE/TE: 334-335, 337, 338-339		
STANDARD II: Students will understand that organisms depend on living and nonliving things within their environment.				
Percentage of coverage in the *student and teacher edition* for Standard II:_____75_____ %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard II: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 2.1: Classify living and nonliving things in an environment.				
a.	Identify characteristics of living things (i.e., growth, movement, reproduction).	SE/TE: 20, 22-23, 24-25, 26, 27, 30-39, 40-41, 42-49, 50-51, 64-65		

b.	Identify characteristics of nonliving things.	SE/TE: 20, 21, 23, 50-51, 52-61, 64-65, 109		
c.	Classify living and nonliving things in an environment.	SE/TE: 20, 21, 23, 50-51, 52-61, 64-65, 109		
Objective 2.2: Describe the interactions between living and nonliving things in a small environment.				
a.	Identify living and nonliving things in a small environment (e.g., terrarium, aquarium, flowerbed) composed of living and nonliving things.	*See related content— SE/TE: 20, 21, 22, 23, 24, 25, 26, 27, 31, 35, 64-65, 151		
b.	Predict the effects of changes in the environment (e.g., temperature, light, moisture) on a living organism.	*See related content— SE/TE: 20, 21, 22, 23, 24, 64-65, 148-157, 160-169		
c.	Observe and record the effect of changes (e.g., temperature, amount of water, light) upon the living organisms and nonliving things in a small-scale environment.	*See related content— SE/TE: 20, 21, 22, 23, 24, 64-65, 148-157, 160-169		
d.	Compare a small-scale environment to a larger environment (e.g., aquarium to a pond, terrarium to a forest).	*See related content— SE/TE: 31, 35, 40-41, 148-157, 160-169		
e.	Pose a question about the interaction between living and nonliving things in the environment that could be investigated by observation.	SE/TE: 109		
STANDARD III: Students will understand the relationship between the force applied to an object and resulting motion of the object.				
Percentage of coverage in the *student and teacher edition* for Standard III: 88 %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard III: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 3.1: Demonstrate how forces cause changes in speed or direction of objects.				
a.	Show that objects at rest will not move unless a force is	SE/TE: 431, 436-437, 439, 474		

	applied to them.			
b.	Compare the forces of pushing and pulling.	SE/TE: 443, 444, 474		
c.	Investigate how forces applied through simple machines affect the direction and /or amount of resulting force.	SE/TE: 427, 431, 460-461, 462-469, 470, 471, 474-475	Science Leveled Readers: *Machines That Build*	
Objective 3.2: Demonstrate that the greater the force applied to an object, the greater the change in speed or direction of the object.				
a.	Predict and observe what happens when a force is applied to an object (e.g., wind, flowing water).	SE/TE: 427, 428-429, 430, 431, 440-441, 442, 443, 444-445, 446, 447, 448, 462, 463, 464-469, 470, 471, 474		
b.	Compare and chart the relative effects of a force of the same strength on objects of different weight (e.g., the breeze from a fan will move a piece of paper, but may not move a piece of cardboard).	*See related content— SE/TE: 427, 431, 444-445, 446, 447, 448, 452-459		
c.	Compare the relative effects of forces of different strengths on an object (e.g., strong wind affects and object differently than a breeze).	SE/TE: 427, 431, 444-445, 446, 447, 448, 452-459		
d.	Conduct a simple investigation to show what happens when objects of various weights collide with one another (e.g., marbles, balls).	*See related content— SE/TE: 446, 458, 459		
e.	Show how these concepts apply to various activities (e.g., batting a ball, kicking a ball, hitting a golf ball with a golf club) in terms of force, motion, speed, direction, and distance (e.g., slow, fast, hit hard, hit soft).	SE/TE: 427, 432, 436, 437, 442, 445, 446, 448, 453, 454-458, 460-461, 462-469, 470, 471		
STANDARD IV: Students will understand that objects near Earth are pulled toward Earth by gravity.				
Percentage of coverage in the *student and teacher edition* for Standard IV: 100 %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard IV: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 4.1: Demonstrate that gravity is a force.				

a.	Demonstrate that a force is required to overcome gravity.	SE/TE: 216, 361, 378, 431, 446, 447, 449, 454, R6		
b.	Use measurement to demonstrate that heavier objects require more force than lighter ones to overcome gravity.	SE/TE: 216, 361, 378, 431, 446, 447, 449, 454, R6		
Objective 4.2: Describe the effects of gravity on the motion of an object.				
a.	Compare how the motion of an object rolling up or down a hill changes with the incline of the hill.	SE/TE: 216, 361, 378, 379, 431, 443, 445, 446, 447, 454, R6		
b.	Observe, record, and compare the effect of gravity on several objects in motion (e.g., a thrown ball and a dropped ball falling to Earth).	SE/TE: 216, 361, 378, 379, 431, 443, 445, 446, 447, 454, R6		
c.	Pose questions about gravity and forces.	SE/TE: 216, 361, 378, 379, 431, 447, 449, 454, R6		
STANDARD V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.				
Percentage of coverage in the *student and teacher edition* for Standard V:_____100_____ %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard V: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 5.1: Provide evidence showing that the sun is the source of heat and light for Earth.				
a.	Compare temperatures in sunny and shady places.	SE/TE: 281, 316, 317, 318, 321, 322, 323, 480-481, 482-483, 484, 485, R6		
b.	Observe and report how sunlight affects people and animals by providing heat and light.	SE/TE: 25, 32, 36, 257, 316, 317, -323, 318-319, 322, 323, 324, 325, 480-481, 485, 500-501, 504-505		
c.	Provide examples of how sunlight affects people and animals by providing heat and light.	SE/TE: 25, 32, 36, 257, 316, 317, -323, 318-319, 322, 323, 324, 325,		

		480-481, 485, 500-501, 504-505		
d.	Identify and discuss as a class some misconceptions about heat sources (e.g., clothes do not produce heat, ice cubes do not give off cold).	SE/TE: 254, 281, 322, 479, 480-481, 482-483, 485		
Objective 5.2: Demonstrate that mechanical and electrical machines produce heat and sometimes light.				
a.	Identify and classify mechanical and electrical sources of heat.	SE/TE: 254, 281, 322, 420, 476, 477, 478-479, 480-481, 482-483, 484-485, 486-487, 514, 521		
b.	List examples of mechanical or electrical devices that produce light.	SE/TE: 322, 420, 476, 499, 500, 501, 507, 508-509, 510, 511, 515, 516, 517, 518, 520, 521, 522		
c.	Predict, measure, and graph the temperature changes produced by a variety of mechanical machines and electrical devices while they are operating.	SE/TE: 281, 316, 317, 318, 321, 322, 323, 477, 480-481, 482-483, 484, 485		
Objective 5.3: Demonstrate that heat may be produced when objects are rubbed against one another.				
a.	Identify several examples of how rubbing one object against another produces heat.	SE/TE: 448, 458, 479, 481		
b.	Compare relative differences in the amount of heat given off or force required to move an object over lubricated/non-lubricated surfaces and smooth/rough surfaces (e.g., waterslide with and without water, hands rubbing together with and without lotion).	SE/TE: 448, 458, 479, 481		